

Title (en)

SYSTEM COMPRISING A PLURALITY OF PROCESSING UNITS MAKING IT POSSIBLE TO EXECUTE TASKS IN PARALLEL, BY MIXING THE MODE OF EXECUTION OF CONTROL TYPE AND THE MODE OF EXECUTION OF DATA FLOW TYPE

Title (de)

SYSTEM MIT MEHREREN VERARBEITUNGSEINHEITEN, DIE ES UNMÖGLICH MACHEN, AUFGABEN GLEICHZEITIG AUSZUFÜHREN DURCH MISCHUNG DER AUSFÜHRUNGSART DES STEUERTYPS UND DER AUSFÜHRUNGSART DES DATENSTROMTYP

Title (fr)

SYSTEME COMPORTANT UNE PLURALITE D'UNITES DE TRAITEMENT PERMETTANT D'EXECUTER DES TACHES EN PARALLELE, EN MIXANT LE MODE D'EXECUTION DE TYPE CONTROLE ET LE MODE D'EXECUTION DE TYPE FLOT DE DONNEES

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Application

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Abstract (en)

[origin: WO2009077429A1] The present invention relates to a system comprising a plurality of processing units making it possible to execute tasks in parallel and a communication network. The processing units are organized as a plurality of groupings of units, each grouping comprising a local memory. The system comprises means for statically allocating tasks to each grouping of units, so that a given task of an application is processed by the same grouping of units from one execution to another of said application. Each grouping of units comprises grouping management means for dynamically allocating tasks to each of its processing units as well as space in the local memory for executing them, so that a given task of an application may not be processed by the same processing unit from one execution to another of said application. The grouping management means comprise means for managing the tasks, means for managing the processing units, means for managing the local memory and means for managing the communications involving its processing units. The management means operate simultaneously and cooperatively. Application: embedded systems for intensive computation.

IPC 8 full level

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